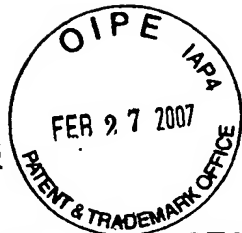


S/N 10/696,676



*IFW*  
PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Keith L. BLACK et al.

Examiner: Richard A. Schnizer

Serial No.: 10/696,676

Group Art Unit: 1635

Filed: October 29, 2003

Docket: 67789-503

Title: METHOD FOR USING POTASSIUM CHANNEL AGONISTS FOR  
DELIVERING A MEDICANT TO AN ABNORMAL BRAIN REGION AND/OR  
MALIGNANT TUMOR

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**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

In compliance with the duty imposed by 37 C.F.R. § 1.56, and in accordance with 37 C.F.R. §§ 1.97 *et. seq.*, the referenced materials are brought to the attention of the Examiner for consideration in connection with the above-identified patent application. Applicants respectfully request that this Supplemental Information Disclosure Statement be entered and the documents listed on the attached Form 1449 be considered by the Examiner and made of record. Pursuant to the provisions of MPEP 609, Applicants request that a copy of the 1449 form, initialed as being considered by the Examiner, be returned to the Applicants with the next official communication.

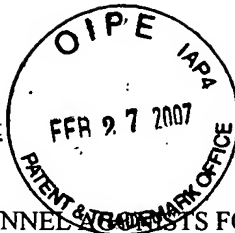
Also attached hereto are copies of Forms PTO-1449 listing references disclosed by Applicants in parent application No. 09/491,500, filed January 26, 2000 (now USP 7,018,979), of which the subject application is a continuation application. Examiner is requested to acknowledge that each of these references has been reviewed in connection with the present continuation application so that these references are printed on the cover page of any patent granted on the present application.

**Supplemental Information Disclosure Statement**

Serial No.: 10/696,676

Filing Date: October 29, 2003

Title: METHOD FOR USING POTASSIUM CHANNEL BLOCKERS FOR  
DELIVERING A MEDICANT TO AN ABNORMAL BRAIN REGION  
AND/OR MALIGNANT TUMOR



Page 2

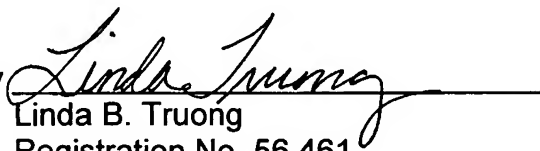
Docket No. 67789-503

No fee is due pursuant to 37 C.F.R. §1.97(b)(4). If additional fees are believed necessary, the Commissioner is authorized to charge any deficiency or credit any overpayment to Deposit Account No. 04-0258.

The Examiner is invited to contact the Applicants' Representative at the below-listed telephone number if there are any questions regarding this communication.

February 21, 2007

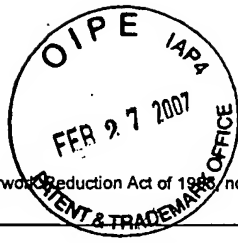
Respectfully submitted,  
DAVIS WRIGHT TREMAINE LLP

By   
Linda B. Truong  
Registration No. 56,461

865 South Figueroa Street  
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**CERTIFICATE UNDER 37 CFR 1.8:** The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 21st day of February, 2007.

  
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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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Application Number	10696676
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First Named Inventor	Keith L. Black
Art Unit	1635
Examiner Name	Richard A. SCHNIZER
Attorney Docket Number	67789-503

**U.S.PATENTS**

Examiner Initial*	Cite No	Patent Number	Kind Code <sup>1</sup>	Issue Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
	1	5011837		1991-04-30	Atwal et al.	
	2	5234922		1993-08-10	Welsh et al.	
	3	7018979		2006-03-28	Black et al.	
	4	6417207		2002-07-09	Garvey et al.	

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**U.S.PATENT APPLICATION PUBLICATIONS**

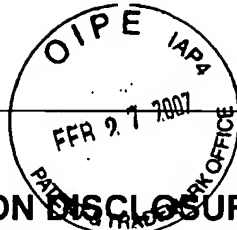
Examiner Initial*	Cite No	Publication Number	Kind Code <sup>1</sup>	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
	1	20030072748		2003-04-17	Black et al.	
	2	20020143188		2003-10-03	Garvey et al.	

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**FOREIGN PATENT DOCUMENTS**

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Examiner Initial*	Cite No	Foreign Document Number <sup>3</sup>	Country Code <sup>2</sup>	Kind Code <sup>4</sup>	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear	T <sup>5</sup>
	1	WO 01/54680			2001-02-07	Cedars-Sinai Medical Center		<input type="checkbox"/>
	2	WO 96/12030			1996-04-25	Rhone-Poulenc Rorer S.A.		<input type="checkbox"/>
	3	WO 01/54771			2001-08-02	Cedars-Sinai Medical Center		<input type="checkbox"/>

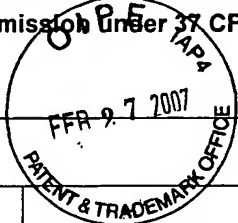
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**NON-PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>5</sup>
	1	Black, Keith L. et al., Intracarotid infusion of RMP-7, a bradykinin analog, and transport of gallium-68 ethylenediamine tetraacetic acid into human gliomas, Journal of Neurosurgery, 86(4):603-609 (1997).	<input type="checkbox"/>
	2	Brayden, Joseph E., Functional roles of KATP channels in vascular smooth muscle, Clinical and Experimental Pharmacology and Physiology, 29(4):312-6 (2001).	<input type="checkbox"/>
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6	Inamura, Takanori et al., Bradykinin selectively opens blood-tumor barrier in experimental brain tumors, Journal of Cerebral Blood Flow Metabolism, 14(5):862-870 (1994).	<input type="checkbox"/>
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11	Shah, Shrenik P. et al., Drug delivery to the central nervous system: a review, Journal of Pharmacy and Pharmaceutical Science, 6(2):252-273 (2003).	<input type="checkbox"/>
12	Morimoto, Takashi et al., Increased levels of tissue endostatin in human malignant gliomas, Clinical Cancer Research, 8:2933-2938 (September 2002).	<input type="checkbox"/>
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28	Abdul, M. et al., Activity of potassium channel-blockers in breast cancer, Anticancer Research, 23(4):3347-3351 (July-August 2003). (ABSTRACT ONLY)	<input type="checkbox"/>
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Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>5</sup>
	49	Bang et al., Nitroglycerin-mediated vasorelaxation is modulated by endothelial calcium-activated potassium channels, Cardiovascular Research, 43(3):772-778 (August 15, 1999). (ABSTRACT ONLY)	<input type="checkbox"/>
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	58	Jackson, W.F. et al., Prostacyclin-induced vasodilation in rabbit heart is mediated by ATP-sensitive potassium channels, American Journal of Physiology, 264(1 Pt 2):H238-43 (January 1993) (ABSTRACT ONLY)	<input type="checkbox"/>

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**EXAMINER SIGNATURE**

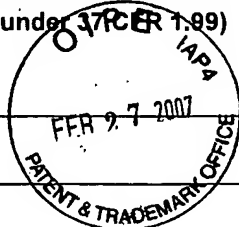
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> See Kind Codes of USPTO Patent Documents at [www.USPTO.GOV](http://www.USPTO.GOV) or MPEP 901.04. <sup>2</sup> Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>3</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>4</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>5</sup> Applicant is to place a check mark here if English language translation is attached.

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(Not for submission under 37 CFR 1.99)



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Art Unit	1635
Examiner Name	Richard A. SCHNIZER
Attorney Docket Number	67789-503

## CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

☐ That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☒ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

☐ See attached certification statement.

☐ Fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ None

## SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	<i>Linda B. Truong</i>	Date (YYYY-MM-DD)	2007-02-21
Name/Print	Linda B. Truong	Registration Number	56461

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

**Form 1449\***  
**INFORMATION DISCLOSURE STATEMENT**

Docket Number:

CEDAR 043453

Application Number:

09/491,500

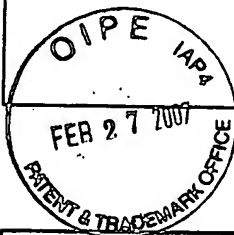
IN AN APPLICATION

Applicant: Keith L. Black and Nagendra S. Ningaraj

(Use several sheets if necessary)

Filing Date: Jan. 26, 2000

Group Art Unit: 1646


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EXAMINER INITIAL	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
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						YES	NO

EXAMINER

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\*Substitute Disclosure Statement Form (PTO-1449)

Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

<b>FORM 1449*</b> <b>INFORMATION DISCLOSURE STATEMENT</b>  <b>IN AN APPLICATION</b>  (Use several sheets if necessary)	Docket Number: <b>CEDAR 043453</b>	Application Number: <b>09/491,500</b>
	Applicant: <b>Keith L. Black and Nagendra S. Ningaraj</b>	
	Filing Date: <b>Jan. 26, 2000</b>	Group Art Unit: <b>1646</b>

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## U.S. PATENT DOCUMENTS

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## FOREIGN PATENT DOCUMENTS

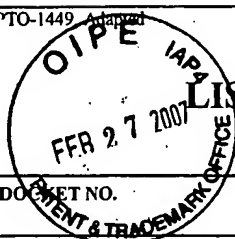
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FORM PTO-1449

**LIST OF INFORMATION DISCLOSED BY APPLICANT**

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ATTY. DOCKET NO.	SERIAL NO. 09/491,500	FILING DATE January 26, 2000
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APPLICANT Keith L. Black and Nagendra S. Ningaraj	GROUP 1632
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EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
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	AB	5,767,160	06/16/98	Kaesemeyer			

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APPLICANT Keith L. Black and Nagendra S. Ningaraj		GROUP 1632

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<b>OTHER REFERENCES</b> (Including Author, Title, Date, Pertinent Pages, Etc.)			
	BH	Ningaraj, N.S., et al., Ca <sup>2+</sup> -dependent K <sup>+</sup> channels are a key regulatory of blood-brain tumor barrier permeability, <u>Congress of Neurological Surgeons Annual Meeting</u> , 50 <sup>th</sup> Anniversary Celebration, September 23-28, 2000, Henry B. Gonzalez Convention Center, San Antonio, Texas, ABSTRACT No.428, p. 219.	
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	BJ	Ningaraj, N.S., et al., Regulation of blood-brain tumor barrier permeability by calcium-activated potassium channels, <u>The Journal of Pharmacology</u> , June 2002, 301: 838-851	
	BK	Pardrige, W., et al., <i>Blood-brain barrier and new approaches to drug delivery</i> , <u>West J Med</u> , 156:281-286 (1992).	
	BL	Robertson, B.E., et al., <i>cGMP-dependent protein kinase activates Ca-activated K channels in cerebral artery smooth muscle cells</i> , <u>Am J Physiol</u> , 265:C299-C303 (1993).	
	BM	Sobey, C.G., et al., <i>Inhibitory effect of 4-aminopyridine on responses of the basilar artery to nitric oxide</i> , <u>Br J Pharmacol</u> , 126:1437-43 (1999). ABSTRACT ONLY.	
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<b>OTHER REFERENCES</b> (Including Author, Title, Date, Pertinent Pages, Etc.)			
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	BY	Tocris Web Page, <a href="http://www.tocris.com/cat/nodonorstxt.html">http://www.tocris.com/cat/nodonorstxt.html</a> No Donors/Precursors, pp.1-2, Downloaded 5/31/00.	
	BZ	Sigma-Aldrich Web page, <a href="http://vsearch.sial.com/search">http://vsearch.sial.com/search</a> 97cgi/s97-cgi, p.1, downloaded 5/31/00.	
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